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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,344	07/17/2003	Hsin-Tang Chien	4392-0136P	8676

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EXAMINER

SAWHNEY, HARGOBIND S

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,344	Applicant(s) CHIENT, HSIN-TANG	
	Examiner Hargobind S. Sawhney	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/24/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 7 is/are allowed.
- 6) ☒ Claim(s) 1, 3-6 and 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Request for Continuation Examination (RCE) with amendment filed on August 24, 2005 have been entered. Accordingly:

- Claims 1-5 have been amended; and
- New claims 6-10 have been added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Zou et al. (US Patent No.: 6,550,942 B1).

Regarding amended Claim 1, lines 1-5, it has been held that the recitations: “a scanning device”; “for emitting a light beam onto said object”; and “the lamp being substantially parallel to the second line defined by the two ends of the object”, with respect to the manner in which a claim apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed

structural limitation. The above-indicated recitations have not been given patentable weight, as none of them is a part of the claimed matter.

Further, regarding amended Claim 1, lines 11-13, the functional language “wherein said light beam is substantially collimated before passing through said transparency equally onto said object” has not been given patentable weight because it is a narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a “means” for performing the specific function, and must be supported by the recitation in the claim of sufficient structure to warrant the presence of the functional language. The means collimating light beam is not expressed in the claim.

Regarding Claim 1, Zou et al. ('942 B1) discloses a lamp assembly 500 (Figure 14, column 11, line 48) comprising:

- a lamp 502 (Figure 14, column 11, line 53) with two ends, and the lamp 502 able to emit light beam onto an object (not shown); and
- a transparency 516 disposed between the lamp 500 and an object (not shown), and the transparency 516 including a first surface receiving the light beam, and a second surface including a plurality of refractors 518 (Figure 14, column 11, lines 55-62); and
- the light beam emitted from the lamp 502 passing through the transparency (Figure 14).

Regarding amended Claim 3, lines 1-5, it has been held that the recitations: “a scanning device” “a scanning device” “for emitting a light beam onto said object”; and

“the lamp being substantially parallel to the second line defined by the two ends of the object”, with respect to the manner in which a claim apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitation. The above-indicated recitations have not been given patentable weight, as none of them is a part of the claimed matter.

Further, regarding amended Claim 3, lines 11-13, the functional language “wherein said light beam is substantially collimated before passing through said tube equally onto said object” has not been given patentable weight because it is a narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a “means” for performing the specific function, and must be supported by the recitation in the claim of sufficient structure to warrant the presence of the functional language. The means collimating the light beam is not expressed in the claim.

Zou et al. ('942 B1) discloses a lamp assembly 500 (Figure 14, column 11, line 48) comprising:

- a lamp 502 (Figure 14, column 11, line 53) with two ends, and the lamp 502 able to emit light beam onto an object (not shown); and
- a tube 504 surrounding the lamp 502; and the tube 504 comprising a light refracting surface 516 including a plurality of refractors 518 for refracting light beams (Figure 14, column 11, lines 55-62).

Regarding amended Claim 4, lines 1-5, it has been held that the recitations: “a scanning device”; “for emitting a light beam onto said object”; and “the lamp being substantially parallel to the second line defined by the two ends of the object”, with

Art Unit: 2875

respect to the manner in which a claim apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitation. The above-indicated recitations have not been given patentable weight, as none of them is a part of the claimed matter.

Further, regarding amended Claim 4, lines 9-12, the functional language “wherein said light beam is substantially collimated before reflecting by the convex equally onto said object” has not been given patentable weight because it is a narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a “means” for performing the specific function, and must be supported by the recitation in the claim of sufficient structure to warrant the presence of the functional language. The means collimating the light beam is not expressed in the claim.

Further, regarding Claim 4, Zou et al. ('942 B1) discloses a lamp 500 (Figure 14, column 11, line 48) comprising:

- a lamp 502 (Figure 14, column 11, line 48) for emitting light beam onto an object (not shown); and
- a convex plate 504 disposed over the lamp 502 for reflecting light beam (Figure 14, column 11, line 53).

4. Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Branson et al. (US Patent Application Pub. No.: US 2003/0090749 A1), hereinafter referred as Branson.

Regarding amended Claim 5, lines 1-4, it has been held that the recitations: “a scanning device”; “for emitting a light beam onto said object”, with respect to the

manner in which a claim apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitation. The above-indicated recitations have not been given patentable weight, as none of them is a part of the claimed matter

Further, regarding amended Claim 5, lines 9-12, the functional language "wherein said light beam is substantially collimated before passing through said tube equally onto said object" has not been given patentable weight because it is a narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specific function, and must be supported by the recitation in the claim of sufficient structure to warrant the presence of the functional language. The means collimating the light beam is not expressed in the claim.

Branson discloses a lamp 10 (Figure 4) comprising:

- a lamp 10 for emitting light beam onto an object 18 (Figure 4, Para. 0015)
- a reflector 26 , including sections 26, 34 and 38, disposed over the lamp 11 (Figure 4, Para. 0017) ; and
- the reflector 26 including a plurality of reflection units 26, 34 and 38 for reflecting the light beams onto the object 18 (Figure 4, Para. 0017);

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zou et al. (US Patent No.: 6,550,942 B1) in view of Wun et al. (US Patent No.: 5,469,303)

Regarding Claim 6, Zou et al. ('942 B1) discloses a lamp assembly 500 (Figure 14, column 11, line 48) comprising a linear light source. Although, Zou et al. ('942 B1) does not specifically teach the linear light source being a fluorescent tube in his invention, it discloses a fluorescent tube as a linear light source being used in the Description of the Prior Art (Column 2, lines 4 and 5). Further, Zou et al. ('942 B1) does not specifically teach the linear light source – fluorescent tube – emitting more light at its central portion than that at its both of the two ends.

On the other hand, Wun et al ('303) discloses a linear light source – fluorescent tube 23 usable for a scanner (Figure 2, column 2, lines 12 and 13). Additionally, Wun et al ('303) teaches the inherent deficiency or characteristic of a fluorescent lamp usually emitting more light at its central portion than that at its both of the two ends (Figure 1, column 1, lines 21-26).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to make use of a fluorescent tube as a linear light source as taught by the prior art description included in Zou et al. ('942 B1) itself, and realize inherent deficiency of emitting more light at its central portion than that at its both of the two ends as taught by Wun et al ('303). IN addition the use of fluorescent tube would provide the needed illumination at relatively low temperature illuminator for a scanner.

Regarding each of claims 8 and 9, dependent on claim 3 and 4 respectively, Zou et al. ('942 B1) in view of Wun et al ('303) discloses a lamp assembly meeting the limitations in similar manner as that applied for claim 6 detailed above.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Branson et al. (US Patent Application Pub. No.: US 2003/0090749 A1), hereinafter referred as Branson, in view of Wun et al. (US Patent No.: 5,469,303)

Branson discloses a lamp assembly comprising a fluorescent lamp as a linear light source. However, Branson does not specifically teach the linear light source – fluorescent tube – emitting more light at its central portion than that at its both of the two ends.

On the other hand, Wun et al ('303) discloses a linear light source – fluorescent tube 23 usable for a scanner (Figure 2, column 2, lines 12 and 13). Additionally, Wun et al ('303) teaches the inherent deficiency or characteristic of a fluorescent lamp usually emitting more light at its central portion than that at its both of the two ends (Figure 1, column 1, lines 21-26).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to realize the inherent deficiency of emitting more light at its central portion than that at its both of the two ends as taught by Wun et al ('303).

Allowable Subject Matter

8. Claims 2 and 7 are allowed.

The prior art of record, including Zou et al. ('942 B1) and Wun et al ('303), does not show or suggest the applicant's invention as claimed. Specifically, the prior art of record does not disclose a lamp for a scanning device combining:

- a tube surrounding a lamp, and the tube further including its central part with larger thickness than the thickness at its end portions as recited in Claim 2.

The combination of the features, including a tube encasing the lamp; and the tube having variable wall thickness, makes this disclosure unique.

Neither combined nor individual teaching of Zou et al. ('942 B1) and Wun et al ('303) discloses the above-indicated a tube surrounding a linear lamp, and further having its wall of variable thickness as detailed above. Therefore, the amended Claim 2 includes allowable subject matter.

Therefore, Claim 2 is allowed over prior art of the record.

Claim 7 is necessarily allowed because of its dependency on the allowed base claim 2.

Response to Amendment

9. Applicant's arguments filed on September 17, 2002 with respect to the 35 U.S.C. 102(e) rejections of claims 1, 2 and 4, and the 35 U.S.C. 102(b) rejections of claims 3 and 5 have been fully considered but they are but they are considered moot in view of the new ground(s) of rejections.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Branson et al. (U.S. Patent Application Pub. No. US 2003/0090749 A1), Mulieri (U.S. Patent No. 5,343,1201), Lu et a. (U.S. Patent No. 5,291,379), Ikeda (U.S. Patent No. 5,189,340) and McGraw et at.(U.S. Patent No. 4,547,813

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S Sawhney whose telephone number is 571 272 2380. The examiner can normally be reached on 6:15 - 2:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571 272 2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HSS
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Stephen Husar
Primary Examiner